THE STATE OF AGRICULTURE AND RURAL DEVELOPMENT IN EGYPT

A little over 50% of Egypt's current population of 80 million live in the rural areas, of which 60% is engaged in farming. Agriculture is the mainstay of over 30% of the total work force accounting for some 18% of GDP and 20% of total exports. With only 3% of the total land area suitable for cultivation, agriculture is dependent almost entirely on irrigation and is concentrated primarily in the areas of the Nile Valley, Delta and Fayoum and their desert fringes. Endowed by fertile soils of the Nile valley and a climate conducive for year round cultivation, yields in the old lands are among the highest in the world for several cereal and horticultural crops. Despite this, the physical limitations of arable land and water keep Egypt a food deficit country. Rural Upper Egypt shows the highest rates of poverty where 51% of the population is below the poverty line for 2011, compared to 44% in 2009ii.

Notwithstanding the problems associated with the upheaval in the world food markets and the impact of increasing globalisation over the next decades, Egyptian agriculture faces substantial problems of its own. Given its resource endowments, the most significant problems are those relating to the available agricultural land and water. With a fast growing population, estimated to reach 95 million by the year 2025, fragmentation of farm holdings, a current problem for the adoption of modern agricultural methods, is likely to become worse in the future. Farm sizes will shrink even further and about 80% of the farmers will have holdings of less than 3.1 feddani.

The current small-scale agriculture in the “old lands” of Egypt is becoming marginal when compared to the modernised agriculture in the “new lands” e.g. in the fringes of the Western Delta. With low returns from small land holdings, land sales for real estate development have and will continue to become more profitable than farming. As a result, urban spread will continue even with existing legislation against construction and the lack of food self-sufficiency is likely to worsen.

Scarcity of water is a key constraint on agricultural growth. The climate in the country is arid, with a very low rainfall. The Nile river is the main and almost exclusive source of surface water in Egypt, and constitute 77 % of agriculture's annual water supply. Irrigation efficiency is low due to high water lossesiv. The question of water exercises an overwhelming shadow over Egyptian agriculture. In terms of resources, the fixed amount of water that Egypt receives from the Nile will be shared among a larger and more diversified population of users. The consequence of a variety of factors including the impact of climate change means that the current available quota of 875 litres per capita per year is likely to go down by nearly 30% to 630 litres per capita per year in 2025. Water for agricultural use is also expected to go down by about 20% from the current 5,000 m³/feddan/year to 4,000 m³/feddan/yearv.

Perhaps as severe as the question of the total availability of water is the fact that since most of the irrigated areas in the Nile Valley and the Delta have subsurface drainage networks which serve as open drain collectors, the waters have become highly polluted due to the dumping of raw sewage in the drains. There is also an extreme shortage of land and increasing fragmentation of holdings. Egypt has one of the poorest land-per-person ratios in the world. Total cultivated land is estimated to be only 3 per cent of the total land area and measures about 8.9 million feddan. Land distribution is also very skewed. Farms are predominantly small with a total of 81% owning less than 3 feddan or 38 %

This project is funded by the European Union
of the country’s entire cultivated area”. While yields in the “old lands” are among the highest in the world for several staple crops, such as wheat, rice and sugar beet, yield improvements have slowed down markedly in recent years, and Egypt has had to import about 40 per cent of its food requirements. For non-traditional high-value crops, yields are still much below the potential, and the margin for improvement is quite high.

Seen together, land and water resource for agriculture represent the crux of the problem in agriculture and rural development in Egypt, and could be summarized as follows:
1) the fragmentation of land holdings make it difficult to apply water management measures;
2) the extensive use of flood irrigation and the lack of modern irrigation techniques (drip and sprinkler) imply a very low irrigation efficiency at the field level;
3) the absence of small channel maintenance implies both low irrigation efficiency as well as insufficient water at the tail end of the canal system;
4) a serious contamination of shallow ground water and agriculture drainage system due to the absence of sewage water collection system;
5) a difficulty in implementing a good water allocation system due to informal urbanisation and land use changes.

In addition to the constraints imposed by land and water, agriculture and productivity is constrained by a host of factors that cover a very wide spectrum of issues which could be summarized in the following:

1) the small farmer is not an attractive market proposition. There are 3.7 million farmers in Egypt, most of whom have very small holdings and limited surpluses for the market. It suits the private sector to negotiate contracts with a few large commercial farmers, given the increasing market demands for good agricultural practices, high quality standards and traceability. Only a small fraction of farmers have contractual arrangements that predetermine the price. These initiatives demonstrate that smallholders can become viable suppliers and can be successfully linked with market intermediaries, processors and exporters provided they are organized into associations or producer groups. In general, small farmers are not well organized to access markets. The fragmented nature of production and a lack of effective farmers’ organizations does not enable them to reduce their transaction costs, increase bargaining power for higher farm-gate prices or effectively link with private-sector, domestic and export markets.

2) in the present situation, small holdings in the “old lands” do not use efficient production techniques (inefficient use of pesticides, herbicides, fertilisers, soil ameliorants and irrigation water ...) causing land degradation, erosion, pollution of the environment and declining crop yields; scattered plots belonging to the same smallholder prohibit efficient use of irrigation water and negatively affects the crop rotation, and limits possibilities for crop diversification.

3) the local markets are underdeveloped, and the marketing infrastructure is poor. There is a high degree of variability in prices of agricultural commodities and limited market information. Smallholders do not have access to accurate information on prices, volumes and quality standards, especially for European and Gulf markets. There is a lack of post-harvest and marketing facilities and low levels of agricultural industrialization. Estimates show that production losses exceed 30% for horticulture produce, 20% for legumes and tubers and 10% for...
for cereals. The high degree of perishability of horticulture and dairy produce leads to rapid quality deterioration, a consequent reduction in prices and reduced farmer incomes. An analysis of the differentials in farm-gate and retail prices shows that the farmer receives 10-35 % of the retail price of perishable commodities

4) the development of the agricultural and rural sectors remains constrained by the lack of access to finance, which inhibits the timely purchase of agricultural inputs, especially for the high-cost inputs required to produce high-value products. This lack of capital often leads to “tied” transactions, as small farmers try individually to secure finance from the trader, who binds them to unfavourable arrangements, further limiting their bargaining power.

5) Most agricultural inputs such as seeds, agro-chemicals, fertilizers and soil ameliorants are subsidised by the Government. However, available Government subsidies and agricultural extension services are not used in the most optimal way and barely contribute to the development of modern production practices. Subsidied inputs are becoming scarce due to budget constraints. Farmers have to buy a growing part of their inputs on the commercial market. In many parts of the “old lands”, Government established Agricultural Cooperatives have no means to function adequately. Agricultural extension services organised by the Government often lack the means for efficient performance and transfer of knowledge from research to the field.

Agricultural policy in Egypt has gone through significant reforms since the early 1990s. The compulsory purchase of all crops has been eliminated and input subsidies phased out. The Government’s present strategy for agricultural development is based on the premise that the development of efficient agriculture and of export opportunities would spur significant agricultural production to levels that would bring poor smallholder farmers into the mainstream of economic activity, and in the process, would enhance food security and incomes and create employment opportunities for the rural on-farm and off-farm sectors.

The strategy for agricultural development in Egypt, up to the year 2030, is based on the optimum allocation and utilization of the available agricultural resources (land, water, labour, capital, management and technology) with the aim of achieving an annual rate of growth of agricultural production of 4.1%, realising a higher degree of food security at large meaning utilization of comparative and competitive advantages and promoting exports while simultaneously achieving a minimum level of self-sufficiency in strategic food crops. At the same time, diversifying rural economies and improving infrastructure and social services in rural areas will contribute to the economic growth and employment opportunities and directly support livelihood in poor areas. Developing organisational and institutional capacities of local stakeholder groups and good governance practices at national and local levels will ensure that the benefits reach local communities.

---

1 The Human Development Report 2010
2 The Ministry of Agriculture & Land Reclamation, Sustainable Agriculture Development Strategy Towards 2030 (Cairo 2009)
3 ibid
4 Rural Development Policy in Egypt towards 2025, Alterra-rapport 1526
5 IFAD Arab Republic of Egypt Country Strategic Opportunities Programme (2012)
7 IFAD

This project is funded by the European Union